IN THE CLAIMS

The following listing of claims is provided in accordance with 37 C.F.R. § 1.121.

1.   (currently amended)   A method for producing an image from image data comprising:

accessing stored image data from a memory, the image data defining an input image acquired using an imaging system;

determining a pixel sampling rate for the image data using an image processing circuit;

determining a desired sampling rate using the image processing circuit, wherein the desired sampling rate is determined based at least partially on a point-spread function of the imaging system or the frequency content of the image data;

comparing the pixel sampling rate to the desired sampling rate using the image processing circuit; and

based upon the comparison, using the image processing circuit to process processing the image data by shrinking the input image if the pixel sampling rate is greater than the desired sampling rate.

2.   (previously presented)   The method of claim 1, wherein the desired sampling rate is a Nyquist rate of sampling for the image.

3.   (canceled)

4.   (original)   The method of claim 1, wherein the pixel sampling rate is determined based upon a display field of view and a size of pixels in the field of view.

5.-7.   (canceled)

8.   (currently amended)   A method for producing an image from image data comprising:

accessing stored image data from a memory, the stored image data defining an input image previously acquired by an imaging system using a first pixel sampling rate;

determining a point-spread function of the imaging system;

using an image processing circuit to determine ~~determining~~ a second pixel sampling rate for the image data based at least partially on a modulation transfer function employing a magnitude of a frequency response of the point-spread function, wherein the second sampling rate is a desired sampling rate;

calculating a shrink parameter as a ratio of the first pixel sampling rate to the desired sampling rate using the image processing circuit; and

processing the image data using the image processing circuit to shrink ~~by shrinking~~ the input image defined by the image data based at least partially on the shrink parameter if the shrink parameter is greater than one.

9.-10. (canceled)

11.   (previously presented) The method of claim 31, wherein processing the image data further comprises resampling the image data.

12.   (original)   The method of claim 11, wherein the image data is resampled to match the desired sampling rate.

13.   (previously presented) The method of claim 8, wherein the desired sampling rate is a Nyquist rate of sampling for the image.

14.-15. (canceled)

16.   (currently amended)   A system for processing image data, the system comprising:

a memory circuit for storing image data, the image data defining an input image acquired by an image [[a]] data acquisition system at a first pixel sampling rate; and

a processing circuit for accessing the image data from the memory circuit, determining a second pixel sampling rate for the image data based at least partially on a modulation transfer function employing a magnitude of a frequency response of a point-spread function of the image data acquisition system, wherein the second pixel sampling rate being is a desired sampling rate, calculating a shrink parameter as a ratio of the first pixel sampling rate to the desired sampling rate, and processing the image data by shrinking the input image defined by the image data based at least partially on the shrink parameter if the shrink parameter is greater than one.

17.-18. (canceled)

19.   (previously presented) The system of claim 33, wherein the processing circuit is further configured to process the image data by resampling the image data.

20.   (original)   The system of claim 19, wherein the image data is resampled to match the desired sampling rate.

21.   (canceled)

22.   (currently amended)   The system of claim 16, wherein the image data acquisition system is selected from a group consisting of a CT system, an MRI system, an ultrasound system, an X-ray system, a tomosynthesis system, and a PET system.

23.   (previously presented) A system for producing an image from image data comprising:

means for accessing stored image data from a memory, the image data defining an input image acquired using an imaging system;

means for determining a pixel sampling rate for the image data;

means for determining a desired sampling rate, wherein the desired sampling rate is determined based at least partially on a point-spread function of the imaging system or the frequency content of the image data;

means for comparing the pixel sampling rate to the desired sampling rate;

means for determining a shrink parameter based upon the comparison; and

means for processing the image data by shrinking the input image if, based upon the comparison, the pixel sampling rate is greater than the desired sampling rate.

24. (currently amended) A system for producing an image from image data comprising:

means for accessing stored image data from a memory, the stored image data defining an input image previously acquired by an imaging system using a first pixel sampling rate;

means for determining a point-spread function of the imaging system;

means for determining a second pixel sampling rate for the image data based at least partially on a modulation transfer function employing a magnitude of a frequency response of the point-spread function, wherein the second pixel sampling rate is a desired sampling rate;

means for calculating a shrink parameter as a ratio of the first pixel sampling rate to the desired sampling rate; and

means for processing the image data by shrinking the image defined by the image data based at least partially on the shrink parameter if the shrink parameter is greater than one.

25. (previously presented) A computer readable medium storing a computer program for producing an image from image data comprising:

code stored on the computer readable medium encoding routines for accessing stored image data defining an input image from a memory, determining a pixel sampling rate for the image data, determining a desired sampling rate, comparing the pixel sampling rate to the desired sampling rate and, based upon the comparison, processing the image data by shrinking the input image if the pixel sampling rate is greater than the desired sampling rate;

wherein the desired sampling rate is determined based at least partially on a point-spread function of the imaging system or the frequency content of the image data.

26.   (currently amended)   A computer readable medium storing a computer program for producing an image from image data comprising:

code stored on the computer readable medium encoding routines for accessing stored image data from a memory, the stored image data defining an input image previously acquired by an imaging system using a first pixel sampling rate, determining a point-spread function of the imaging system, determining a second pixel sampling rate for the image data based at least partially on a modulation transfer function employing a magnitude of a frequency response of the point-spread function, the second pixel rate being a desired sampling rate, calculating a shrink parameter as a ratio of the first pixel sampling rate to the desired sampling rate, and processing the image data by shrinking the image defined by the image data based at least partially on the shrink parameter if the shrink parameter is greater than one.

27.   (previously presented) The method of claim 1, wherein shrinking the input image is at least partially based upon a shrink parameter.

28.   (previously presented) The method claim 27, wherein the shrink parameter is a ratio of the pixel sampling rate to the desired sampling rate.

29.   (previously presented) The method of claim 1, wherein processing the image data does not comprise shrinking the input image if the pixel sampling rate is less than the desired sampling rate.

30.   (previously presented) The method of claim 8, wherein processing the image data does not comprise shrinking the input image defined by the image data if the shrink parameter is less than one.

31.   (previously presented) The method of claim 8, wherein shrinking the input image defined by the image data is further based upon a redundancy metric determined based upon a display field of view and a size of pixels in the field of view.

32.   (previously presented) The system of claim 16, wherein the processing circuit is configured to not shrink the input image defined by the image data if the shrink parameter is less than one.

33.   (previously presented) The system of claim 16, wherein shrinking the input image defined by the image data is further based upon a redundancy metric determined based upon a display field of view and a size of pixels in the field of view.

34.   (canceled)